WHAT IS CLAIMED IS:

1. An integrated audio/video sensor, comprising:

an image-receiving module for sensing an image;

a sound-receiving module for sensing a sound; and

a signal-transforming module for transforming the received image and the received sound into an audio/video signal.

2. The integrated audio/video sensor of claim 1, wherein the signal-transforming module further comprising:

an image-sensing chip for detecting the image and outputting the audio/video signal;

an audio amplifier chip for detecting the sound, amplifying the sound detected and outputting the audio/video signal;

an audio/video processing chip for carrying out a post-processing of the audio/video signal; and

a peripheral circuit chip.

3. The integrated audio/video sensor of claim 2, wherein the image-sensing chip comprises a complementary metal-oxide-semiconductor (CMOS) image-sensing module or a charged coupled device (CCD).

4. The integrated audio/video sensor of claim 1, wherein the signal-transforming module is fabricated by a multi-chip module (MCM) method or a system on a chip (SOC) method.

5. The integrated audio/video sensor of claim 1, wherein the signal-transforming module transforms the received image and the received sound synchronously.

6. The integrated audio/video sensor of claim 1, wherein the audio/video signal comprises a video signal component and an audio signal component.

7. The integrated audio/video sensor of claim 1, wherein the sound-receiving module comprises a condenser microphone.

8. An integrated audio/video signal processing system, comprising:

an integrated audio/video sensor, comprising:

an image-receiving module for sensing an image;

a sound-receiving module for sensing a sound; and

a signal-transforming module for transforming the received image and the received sound into an audio/video signal; and

an audio/video system for post-processing the audio/video signal.

9. The integrated audio/video signal processing system of claim 8, wherein the signal-transforming module further comprising:

an image-sensing chip for detecting the image and outputting the audio/video signal;

an audio amplifier chip for detecting the sound, amplifying the sound detected and outputting the audio/video signal;

an audio/video processing chip for carrying out a post-processing process on the audio/video signal; and

a peripheral circuit chip.

10. The integrated audio/video signal processing system of claim 9, wherein the image-sensing chip further comprises a complementary metal-oxide-semiconductor (CMOS) image-sensing module or a charged coupled device (CCD).

11. The integrated audio/video signal processing system of claim 8, wherein the signal-transforming module is fabricated using either a multi-chip module (MCM) method or a system on a chip (SOC) method.

12. The integrated audio/video signal processing system of claim 8, wherein the signal-transforming module transforms the received image and the received sound synchronously.

13. The integrated audio/video signal processing system of claim 8, wherein the audio/video signal comprises a video signal component and an audio signal component.

14. The integrated audio/video signal processing system of claim 8, wherein the sound-receiving module comprises a condenser microphone.